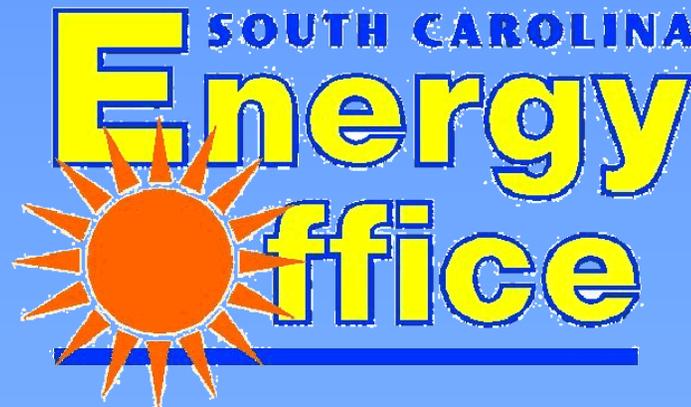


Creating a Model Energy Conservation Plan

S.C. Resource Conservation
Challenge Workshop
October 24, 2007

Whitney Wurzel
Public Information Coordinator
South Carolina Energy Office



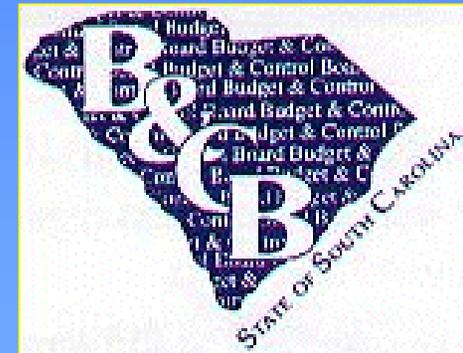
SCEO Mission

To increase energy efficiency and diversity, enhance environmental quality and save energy dollars for South Carolina.



Brief History of the SCEO

- Energy Office was created in 1973
- South Carolina Energy Conservation and Efficiency Act of 1992
- State Budget and Control Board



Best Practices Guide

A guide designed to provide the facility director with the useful methods of reducing the consumption and cost of energy.



Best Practices Guide Content



- 1. Energy Management, Managers and Planning**
- 2. Establishing an Energy Plan**
- 3. Methods of Energy Conservation**
- 4. Program Assistance**

Energy Management, Managers and Planning



Dedicated Energy Manager

Navigational Determination

- Determine where you are
- Determine where you need to go
- Determine how to get there



Establishing an Energy Plan

Facility Data Collection

- Conditioned area of the building
- Establish baseline

Determining Goals

- Observe other achievements

Reports and Reporting

- Track & record against baseline

Methods of Energy Conservation



- Construction
- Equipment
- Program Control
- Behavior Modification
- Maintenance
- Managing

Construction

- **Energy Conservation . . .**
A vital factor in the design!
- **Life Cycle Costing**



Equipment

- HVAC
- Plumbing
- Electrical



Program Control

- “Automatic (or Smart) Buildings”
- Controlled Systems
- Supervision



Behavior Modification

- Basic Comfort
- Cliental



Maintenance

- Natural Ally of Energy Conservation
- Organized and Coordinated



Managing

- Record
- Monitor
- Supervise





Program Assistance

Technical

- Audits
- Technical Assistance

Financial

- Self-funding Investment Program
- Loans
- Performance Contracting

Sample Energy Plan

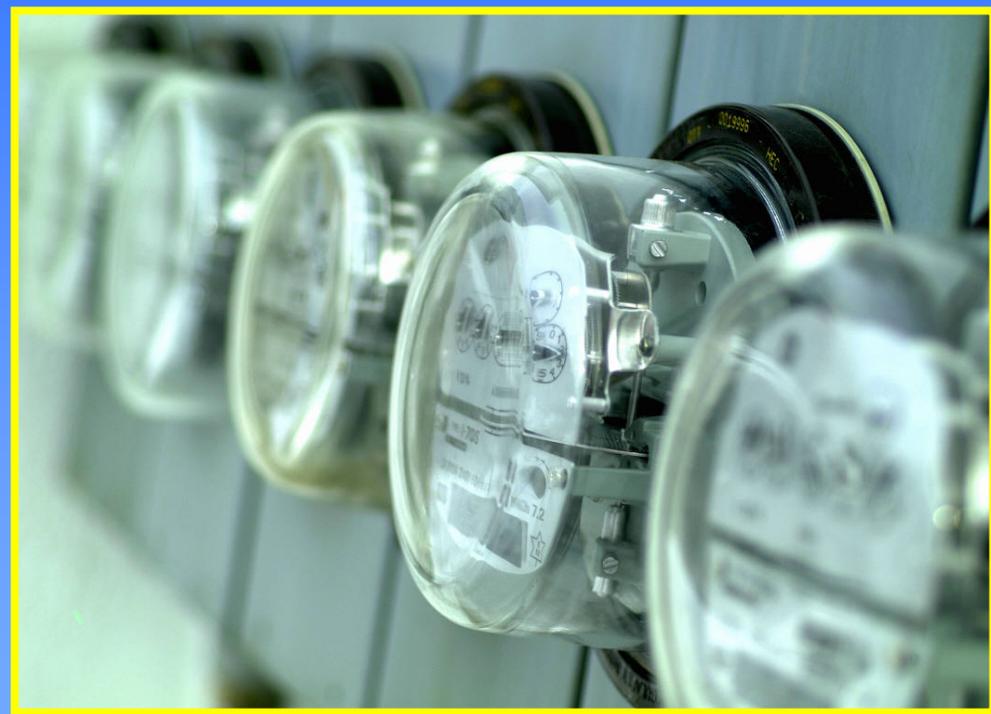
1. Colleges and Universities
2. School Districts
3. State Agencies

Sample Plan Content

- Purpose
- Policy
- Energy Manager
- Facility Data
- Goals
- Goal Achievement
- Reporting
- Appendix A & B

Purpose

Plan for Energy Use and Conservation!



Specific In Intent . . .

Eliminate unnecessary
use of purchased energy



Energy Manager

Outlines Duties and Responsibilities



2006 ASCEM Energy
Manager of the Year:
David Hogge of Berkeley
School District

Facility Data

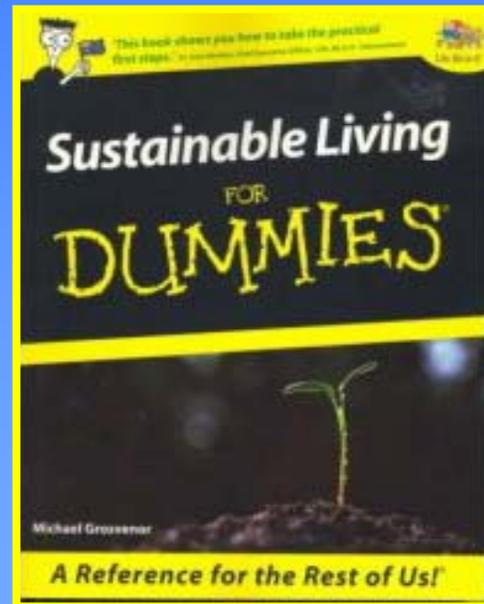
- Obtain accurate square footage
- Evaluate electrical and gas metering
- Look at energy software
- Establish baseline



Goals



Establish at least a five year plan
for energy reduction!



Goal Achievement

Address . . .

- Operation and Maintenance
- Projects for Conservation
- New Construction
- Involvement by Administration and Staff

Appendix A

Operating and Maintenance Suggested Measures:

- Building Envelope Infiltration
- Lighting
- Heating and Cooling
- Utility Plant Distribution

Appendix B

Suggested Projects for Conservation:

- Building Envelope
- Lighting
- Heating and Cooling Systems



Follow-Up

Workshops

- 3-4 to present Best Practices Guide

Publicize

- Prepare hard copy and CDs for distribution to institutions

Questions?



Thank You!



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